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Claims

- 1. PDK4 as biomarker for determining PPARdelta activity.
- 2. PDK4 as biomarker for determining PPARdelta activity in muscle.
- 3. PDK4 as a marker for diagnosing a disease involving dysregulation of PPARdelta activity.
 - 4. A method of detecting or monitoring the activity of PPARdelta in a host comprising quantifying the mRNA expression level of PDK4.
 - 5. A method according to claim 4 comprising the step of determining the mRNA expression level of PDK4 relative to a control.
- 10 6. A method of determining whether a test compound modulates PPARdelta activity in a host comprising
 - a) exposing the host to the test compound and
 - b) quantifying the mRNA expression level of PDK4.
- 7. A method according to claim 6 comprising determining the mRNA expression level of PDK4 relative to a control.
 - 8. A method for monitoring treatment of patients suffering from a disease associated with dysregulation of PPARdelta activity, comprising the steps of
 - a) purifying RNA from muscle cells isolated from patients treated with a modulator of PPARdelta activity and
- b) measuring the mRNA expression of PDK4.
 - 9. A method according to claim 8 comprising determining the mRNA expression level of PDK4 relative to a control.
 - 10. Compounds identified by the methods of any one of the claims 4 to 9.
- 11. Use of compounds identified by a method of any one of the claims 4 to 9 for the preparation of a medicament for the treatment of a disease involving dysregulation of PPARdelta activity.

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- 12. A method of detecting or monitoring the activity of PPARdelta in a host comprising quantifying the protein expression level of PDK4.
- 13. A method according to claim 12 comprising the step of determining the protein expression level of PDK4 relative to a control.
- 5 14. A method of determining whether a test compound modulates PPARdelta activity in a host comprising
 - a) exposing the host to the test compound and
 - b) quantifying the protein expression level of PDK4.
- 15. A method according to claim 14 comprising determining the protein expression level of PDK4 relative to a control.
 - 16. A method for monitoring treatment of patients suffering from a disease associated with dysregulation of PPARdelta activity, comprising the steps of
 - a) purifying protein from muscle cell isolated from patients treated with a modulator of PPARdelta activity and
- b) measuring the protein expression of PDK4.
 - 17. A method according to claim 16 comprising determining the protein expression level of PDK4 relative to a control.
 - 18. Compounds identified by a method according to any one of the claims 12 to 17.
- 19. Use of compounds identified by a method according to any one of the claims 12 to
 17 for the preparation of a medicament for the treatment of a disease involving
 dysregulation of PPARdelta activity.
 - 20. Use of PDK4 as biomarker for determining PPARdelta activity.
 - 21. Use of PDK4 as biomarker for determining PPARdelta activity in muscle.
- Use of PDK4 as a marker for diagnosing a disease involving dysregulation of
 PPARdelta activity.
